

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A porphyrin compound containing a biotinyl group represented by Formula (I):

Por-A-Bi

wherein:

Por represents a porphyrin residue forming a metal complex selected from a group consisting of heme a, heme b, heme c, variant heme c, heme d, heme d1, siroheme, and heme o;

Bi represents a biotinyl group or a biotinyl group substituted with halogen, nitro, cyano or C₁₋₆ alkyl; [[and]]

~~A represents a C₄-C₃₀ hydrocarbyl group, or a C₄-C₃₀ heterohydrocarbyl group having 1-10 heteroatoms selected from a group consisting of oxygen, sulfur, and nitrogen is selected from a group consisting of~~

- NH- NH- ,

- NH- NH- CO- (CH₂)_n- NH- ,

- NH- NH- CO- (CH₂)_n- NH- CO- (CH₂)_n- NH- ,

- NH- (CH₂)_n- NH- ,

- NH- NH- CO- (CH₂)_n- NH- ,

- NH- NH- CO- (CH₂)_n- CO- NH- NH- ,

- NH- (CH₂)_n- CO- NH- NH- , and

- NH(CH₂)_n- CO- NH- (CH₂)_n- CO- NH- NH- , and

in the above formulae, each n independently represents 1-10.

2. (Cancelled)

3. (Previously Presented) The compound according to claim 1, wherein the Por is a heme b residue.

4. (Cancelled)

5. (Previously Presented) The compound according to claim 1, wherein the Bi is a biotinyl group.

6. (Cancelled)

7. (Currently Amended) The compound of claim 1, wherein the A is -NH-
NH- CO- (CH₂)₅- NH- selected from a group consisting of
-NH-NH-,
-NH-NH-CO-(CH₂)_n-NH-,
-NH-NH-CO-(CH₂)_n-NH-CO-(CH₂)_n-NH-,
-NH-(CH₂)_n-NH-,
-NH-NH-CO-(CH₂)_n-NH-,
-NH-NH-CO-(CH₂)_n-CO-NH-NH-,
-NH-(CH₂)_n-CO-NH-NH, and
-NH(CH₂)_n-CO-NH-(CH₂)_n-CO-NH-NH-
in these formulae each n independently represents 1-10.

8. (Original) A method for preparing the porphyrin compound containing a biotinyl group according to claim 1, comprising reacting a porphyrin optionally forming a metal complex with a compound containing a terminally aminated biotinyl group in the presence of a coupling agent.

9. - 10. (Cancelled)

11. (Original) A hemoprotein labeling compound that is the compound according to claim 1.

12. (Cancelled)

13. (Currently Amended) A diagnostic agent for hemoprotein-associated diseases, the diagnostic agent comprising a porphyrin compound containing a biotinyl group represented by Formula (I):

Por-A-Bi

wherein:

Por represents a porphyrin residue forming a metal complex selected from a group consisting of heme a, heme b, heme c, variant heme c, heme d, heme d1, siroheme, and heme o;

Bi represents a biotinyl group or a biotinyl group substituted with halogen, nitro, cyano or C₁₋₆ alkyl; and

~~A represents a C₄-C₃₀ hydrocarbyl group, or a C₄-C₃₀ heterohydrocarbyl group having 1-10 heteroatoms selected from a group consisting of oxygen, sulfur, and nitrogen is selected from a group consisting of~~

- NH- NH- ,
- NH- NH- CO- (CH₂)_n- NH- ,
- NH- NH- CO- (CH₂)_n- NH- CO- (CH₂)_n- NH- ,
- NH- (CH₂)_n- NH- ,
- NH- NH- CO- (CH₂)_n- NH- ,
- NH- NH- CO- (CH₂)_n- CO- NH- NH- ,
- NH- (CH₂)_n- CO- NH- NH- , and
- NH(CH₂)_n- CO- NH- (CH₂)_n- CO- NH- NH- , and

in the above formulae, each n independently represents 1-10.

14. (Currently Amended) A therapeutic drug for photodynamic therapy, the diagnostic agent comprising a porphyrin compound containing a biotinyl group represented by Formula (I):

Por-A-Bi

wherein:

Por represents a porphyrin residue selected from a group consisting of uroporphyrin-I, uroporphyrin-II, coproporphyrin-III, protoporphyrin-IX, and hematoporphyrin-IX;

Bi represents a biotinyl group or a biotinyl group substituted with halogen, nitro, cyano or C₁₋₆ alkyl; and

A represents a C₄-C₃₀ hydrocarbyl group, or a C₄-C₃₀ heterohydrocarbyl group having 1-10 heteroatoms selected from a group consisting of oxygen, sulfur, and nitrogen is selected from a group consisting of

- NH- NH- ,
- NH- NH- CO- (CH₂)_n- NH- ,
- NH- NH- CO- (CH₂)_n- NH- CO- (CH₂)_n- NH- ,
- NH- (CH₂)_n- NH- ,
- NH- NH- CO- (CH₂)_n- NH- ,
- NH- NH- CO- (CH₂)_n- CO- NH- NH- ,
- NH- (CH₂)_n- CO- NH- NH- , and
- NH(CH₂)_n- CO- NH- (CH₂)_n- CO- NH- NH- , and

in the above formulae, each n independently represents 1-10.